

10	AAE9.274 standard: DANA: 972 BP.
11	AA
12	AAE9.2740.
13	AA
14	02 MAY 2001 (first entry)
15	AA
16	Arabidopsis thaliana FAE1 gene promoter.
17	AA
18	Arabidopsis thaliana FAE1 fatty acid elongation 1
19	AA
20	seed specific gene expression in transgenic plant; seed development
21	AA
22	seed lipid metabolism ds.
23	AA
24	Arabidopsis thaliana.
25	AA
26	W020011061-A2.
27	AA
28	15-FEB-2001.
29	AA
30	04-AUG-2000; 2000W0-CA00907.
31	AA
32	04-AUG-1999; 99US-0147133.
33	AA
34	(OY16-2) ERV insertion sequence.
35	AA
36	AA
37	Kunst L., Clowes S.
38	AA
39	WPI: 2001-191548/19.
40	AA
41	key abundant metabolic acid for modulating seed-specific expression in
42	AA
43	Arabidopsis; comprises a heterologous promoter with a transcriptional
44	AA
45	regulatory region of the 5' region of a plant fatty acid elongation 1
46	AA
47	gene.
48	AA
49	disclosure: Fig 1; 41pp; English.
50	AA

The *proat* sequence is the promoter of the Arabidopsis thaliana *FAB1* (fatty acid elongation 1) gene. Nuclear acid constructs comprising transcriptional regulatory regions homologous to plant *FAB1* promoters may be used in transgenic cells or plants to promote expression of *toro* and endogenous genes in developing seeds. The constructs are used to promote expression of *toro* and endogenous genes in developing seeds, to affect seed lipid metabolism, protein or carbohydrate composition and accumulation, or seed development. Transcriptional regulatory regions of the *FAB1* gene may be useful for the production of modified seeds containing novel recombinant proteins that have pharmaceutical, industrial or nutritional value. The nucleic acids may be used as plant breeding tools, as molecular markers to aid in plant breeding programmes. Such techniques include using the gene as a molecular probe or using the DNA sequence to design PCR primers for use in screening techniques.

SeqScore	97.7	100	84.1	67.1	100	97.7	97.7	97.7
Query Match		100	98		Score	94.1	100	72.2
Post Local Similarity		100	99		Frag No.	5	5	7
Matches	444	Conserved	40	Matches	0	Dups	0	

[illegible][illegible]

RESULT	4
AA661745	
110	AA661745 standard; rDNA; 1468 bp.
XX	
XX	AA661745;
XX	
XX	
12-JUL-2001	(11 first cults)

KW KCS; beta-ketoglutarate synthase; transaminase; plant; long chain fatty acid
RW cleaning composition; cosmetic dye additive; lubricant; preservative;
plant origin; speed; speedier expression; fatty acid biosynthesis;
RW lipid metabolism; SS.
XX

N
XX
XX
F-N
XX
I-6
XX
XX
XX

b) darts 1974 - 04 April 8.

W+200] 2y2 yB A2.

26-Apr-200].

20-yCT-2050; 2(0+0W+EP] 0.463.

XX
XX
XX
XX
XX
XX
XX
XX
XX
XX
XX
XX
XX

20-06-1997, 8:00, 1st year, 1997.

(FHEW-) GES. FHEWER & VERM VON SCHUTZRECHTEN-GVS,
P1
MOTTO FF_j, HAW J., FLUGZEIG M;
WP1; 2001-274877/2B.
XX

1365 100% pure and the concentration of the reaction mixture was 0.25 g/ml.
1366 1367 1368 1369 1370 1371 1372 1373 1374 1375 1376 1377 1378 1379 1380 1381 1382 1383 1384 1385 1386 1387 1388 1389 1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1410 1411 1412 1413 1414 1415 1416 1417 1418 1419 1420 1421 1422 1423 1424 1425 1426 1427 1428 1429 1430 1431 1432 1433 1434 1435 1436 1437 1438 1439 1440 1441 1442 1443 1444 1445 1446 1447 1448 1449 1450 1451 1452 1453 1454 1455 1456 1457 1458 1459 1460 1461 1462 1463 1464 1465 1466 1467 1468 1469 1470 1471 1472 1473 1474 1475 1476 1477 1478 1479 1480 1481 1482 1483 1484 1485 1486 1487 1488 1489 1490 1491 1492 1493 1494 1495 1496 1497 1498 1499 1500 1501 1502 1503 1504 1505 1506 1507 1508 1509 1510 1511 1512 1513 1514 1515 1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540 1541 1542 1543 1544 1545 1546 1547 1548 1549 1550 1551 1552 1553 1554 1555 1556 1557 1558 1559 1560 1561 1562 1563 1564 1565 1566 1567 1568 1569 1570 1571 1572 1573 1574 1575 1576 1577 1578 1579 1580 1581 1582 1583 1584 1585 1586 1587 1588 1589 1590 1591 1592 1593 1594 1595 1596 1597 1598 1599 1600 1601 1602 1603 1604 1605 1606 1607 1608 1609 1610 1611 1612 1613 1614 1615 1616 1617 1618 1619 1620 1621 1622 1623 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640 1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1655 1656 1657 1658 1659 1660 1661 1662 1663 1664 1665 1666 1667 1668 1669 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688 1689 1690 1691 1692 1693 1694 1695 1696 1697 1698 1699 1700 1701 1702 1703 1704 1705 1706 1707 1708 1709 1710 1711 1712 1713 1714 1715 1716 1717 1718 1719 1720 1721 1722 1723 1724 1725 1726 1727 1728 1729 1730 1731 1732 1733 1734 1735 1736 1737 1738 1739 1740 1741 1742 1743 1744 1745 1746 1747 1748 1749 1750 1751 1752 1753 1754 1755 1756 1757 1758 1759 1760 1761 1762 1763 1764 1765 1766 1767 1768 1769 1770 1771 1772 1773 1774 1775 1776 1777 1778 1779 1780 1781 1782 1783 1784 1785 1786 1787 1788 1789 1790 1791 1792 1793 1794 1795 1796 1797 1798 1799 1800 1801 1802 1803 1804 1805 1806 1807 1808 1809 1810 1811 1812 1813 1814 1815 1816 1817 1818 1819 1820 1821 1822 1823 1824 1825 1826 1827 1828 1829 1830 1831 1832 1833 1834 1835 1836 1837 1838 1839 1840 1841 1842 1843 1844 1845 1846 1847 1848 1849 1850 1851 1852 1853 1854 1855 1856 1857 1858 1859 1860 1861 1862 1863 1864 1865 1866 1867 1868 1869 1870 1871 1872 1873 1874 1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2

activation (1) is used to generate transpolymer plants or microorganisms with increased content of long-chain fatty acids, especially increased ratio of 22:1 to 20:1 ratio, by the well-known *mutator* mutants are usually used as (or for producing) seed-planted composites. Cosmetics, dye additives, lubricants, preservatives, plasticizers etc. where the fatty acids are polyunsaturated, they are also useful in nutrition and pharmacologicals. A promoter (2a), from (1), is used to

particularity, these *hox* genes are expressed by a pattern of overlapping, but distinct, genes by and through co-suppression methods. (1), encoding an enzyme that catalyzes the conversion of fatty acids to long-chain fatty acids. A vector containing the *hox* promoter, the K15 sequence of *B. burgdorferi*, and the polyA signal from the same gene, was used to transform the *hox* gene into the *B. burgdorferi* cell. The *hox* gene was then expressed in the *B. burgdorferi* cell, and the *hox* gene was then expressed in the *B. burgdorferi* cell.

7.38, 20.13, 5.66, 22.11, and 0.48, 24.11, 1.60, 13.48, 57.46 for all very long chain fatty acids. Comparable figures for the parent variety were 1.98, 0.18, 0.38, and 0.38 (2.38 total). This sequence represents a *Pseudomonas* napus KCS promoter fragment described in the method of the invention.

